

REMARKS

Claims 1, 2, 4-8 and 10-19 are pending in this application. Claims 1 and 6 have been amended. Claims 3 and 9 have been canceled and their limitations have been incorporated in amended independent claims 1 and 6, respectively. New claims 14-19 have been added (directed to the embodiments illustrated in Figures 2 and 3). No new matter has been introduced.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Schmieding (U.S. Patent No. 6,027,523) (“Schmieding”) in view of Martins et al. (U.S. Patent No. 5,306,290) (“Martins”). This rejection is respectfully traversed.

The claimed invention relates to a suture anchor assembly for attachment of tissue to bone. As such, amended independent claim 1 recites a “suture anchor assembly for attachment of tissue to bone” having “a suture anchor comprising . . . two transverse suture passages extending through the body member, the suture passages being substantially perpendicular to the longitudinal axis, each of the suture passages having a respective suture recess provided therein” and “a tissue-fixation device attached to the suture anchor, the tissue-fixation device having a plurality of holes.” Amended independent claim 1 also recites “a single suture strand that passes through the two transverse suture passages of the suture anchor and through the holes of the tissue-fixation device, the single suture strand attaching the suture anchor to the tissue-fixation device and terminating in at least one knot disposed within one of the suture recesses of the suture anchor.”

Schmieding relates to “a suture anchor assembly for attachment of tissue to bone” that includes “a suture anchor having a distal end and a proximal end, the proximal end having an opening.” (Abstract). According to Schmieding, a “filament strand is looped through the opening and is attached at either end to a disk.” (Abstract).

Martins relates to “a suture retaining device in the form of a frusto-conical button having parallel upper and lower planar surfaces which are connected together by a conical surface.” (Abstract). Martins also teaches that “[T]he button is provided with a recessed chamber for substantially completely accommodating one or more suture knots.” (Abstract).

Schmieding and Martins, considered alone or in combination, do not disclose or suggest all limitations of claims 1, 2, 4 and 5. Schmieding is silent about “a suture anchor comprising . . . two transverse suture passages . . . having a respective suture recess provided therein” and “a tissue-fixation device attached to the suture anchor . . . having a plurality of holes,” much less about “a single suture strand that passes through the two transverse suture passages of the suture anchor and through the holes of the tissue-fixation device, the single suture strand attaching the suture anchor to the tissue-fixation device and terminating in at least one knot disposed within one of the suture recesses of the suture anchor,” as claim 1 recites. In Schmieding, knots of filament 6 are provided on top of disk 4 (so that filament 6 captures the disk 4 onto the proximal end of suture anchor 2), and not within a suture recess provided within a suture passage of the anchor body, as in the claimed invention.

Martins also does not disclose or suggest “a suture anchor” with “two transverse suture passages . . . having a respective suture recess provided therein” and “a tissue-fixation device attached to the suture anchor . . . having a plurality of holes,” or a “a single suture strand that passes through the two transverse suture passages of the suture anchor and through the holes of the tissue-fixation device, the single suture strand attaching the suture anchor to the tissue-fixation device and terminating in at least one knot disposed within one of the suture recesses of the suture anchor,” as claim 1 recites. Martins teaches button or washer 5 attached to a barbed suture anchor 135, and not the specific limitations of the claimed invention.

In the Office Action dated August 13, 2007, the Examiner asserts that “Martins teaches placing the knot in a recessed region so that the knot does not protrude above the tissue.” (August 13, 2007 Office Action at 3). Applicants agree that Martins teaches, indeed, the placement of a knot within a recessed region; however, the recessed region of Martins is not part of an anchor or of an anchor body, but rather part of a button or washer. There is no indication or suggestion in Martins that suture anchor 135 - which is provided with a plurality of barbs to pass easily through a hole and lodge itself in the hole - would accommodate suture passages, or suture recesses, or suture knots disposed within such recesses. For at least these reasons, the

Office Action fails to establish a *prima facie* case of obviousness and withdrawal of the rejection of claims 1, 2, 4 and 5 is respectfully requested.

Claims 6-8, 10 and 11 are rejected under 35 U.S.C. §103(a) as being unpatentable over Schmieding in view of Martins and further in view of Morgan (U.S. Pat. Publ. No. 2002/0120292) (“Morgan”). This rejection is respectfully traversed.

Amended independent claim 6 recites a “suture anchor assembly for attachment of tissue to bone” comprising “a suture anchor comprising a body member . . . and at least two transverse suture passages extending through the body member, the two suture passages being substantially perpendicular to the longitudinal axis, each of the suture passages being provided with a suture recess, wherein the suture recess is configured to house a suture knot.” Amended independent claim 6 also recites “a tissue-fixation device attached to the suture anchor . . . having a plurality of holes” and “a single suture strand that passes through the two transverse suture passages of the suture anchor and through the holes of the tissue-fixation device, the single suture strand attaching the suture anchor to the tissue-fixation device and terminating in at least one knot disposed within one of the suture recesses of the suture anchor.”

Morgan relates to a “suture anchor for securing soft tissue to bone including a body extending along a longitudinal axis between opposite ends, and at least one eyelet extending between lateral surfaces of the body for receiving a suture.” (Abstract). According to Morgan, the eyelet defines “two entry/exit void regions and a central void region extending between the entry/exit void regions.” (Abstract).

The subject matter of claims 6-8, 10 and 11 would not have been obvious over Schmieding, Martins and Morgan, considered alone or in combination. Schmieding and Martins do not disclose or suggest “at least two transverse suture passages extending through the body member . . . each of the suture passages being provided with a suture recess, wherein the suture recess is configured to house a suture knot” or “a single suture strand that passes through the two transverse suture passages of the suture anchor and through the holes of the tissue-fixation device, the single suture strand attaching the suture anchor to the tissue-fixation device and

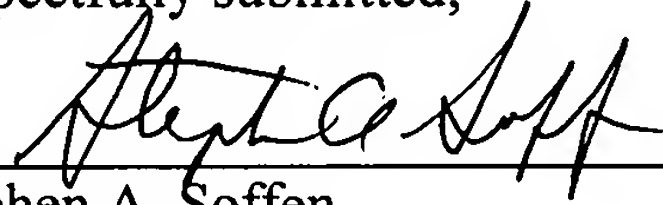
terminating in at least one knot disposed within one of the suture recesses of the suture anchor,” as amended independent claim 6 recites. Schmieding teaches that knots of filament 6 are provided on top of disk 4 (so that filament 6 captures the disk 4 onto the proximal end of suture anchor 2), and not within suture recesses provided within suture passages of the anchor body, as in the claimed invention. Martins teaches knots provided within button or washer 5 that is attached to a barbed suture anchor 135, and not the specific limitations of the claimed invention.

Morgan fails to address the deficiencies of Schmieding and Martins. Morgan teaches a parabolic eyelet suture anchor having a specific configuration (i.e., with an eyelet extending between opposite lateral surfaces of the body, the eyelet defining two entry/exit void regions) and not a “suture anchor assembly” having “a suture anchor” and “a tissue-fixation device attached to the suture anchor,” much less the specific characteristics of the suture anchor provided with suture recesses that house suture knots, as in the claimed invention. For at least these reasons, the Office Action fails to establish a *prima facie* case of obviousness and withdrawal of the rejection of claims 6-8, 10 and 11 is respectfully requested.

Allowance of all pending claims is solicited.

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